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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,715	01/06/2006	Jurgen Kempf	014442-000033	6959
24239 7590 07/08/2009 MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709				
EXAMINER				
CHAWAN, SHEELA C				
ART UNIT		PAPER NUMBER		
2624				
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07/08/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,715

**Applicant(s)**

KEMPF, JURGEN

**Examiner**

SHEELA C. CHAWAN

**Art Unit**

2624

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-114 is/are pending in the application.  
4a) Of the above claim(s) 71,80,87-91,97,102 and 103 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,5-8,10,11,14,19,23,45,49,52,54,55,65-67 and 70 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/10/05: 7/20/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Election/Restriction***

2. Claims 71, 80, 87-91, 97, 102 and 103 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant's has elected group I, claims 1-2, 5-8, 10-11, 14, 19, 23, 45, 49, 52, 54, 55, 65-67 and 70, filed on 4/23/09 is acknowledge.

***Response to Amendment***

3. Applicant's amendment filed on 4/23/09 has been entered and made of record.  
Claims 3-4, 9, 12-13, 15-18, 20- 22, 24-44, 46-48, 50-51, 53, 56-64, 68, 69, 72-79, 81-86, 92-96, 98-107 and 104-114 are cancelled.

Claims 1-2, 5-8, 10-11, 14, 19, 23, 45, 49, 52, 54, 55, 65-67 and 70 are pending in the application.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 8/10/05; 7/20/05, the information disclosure statement is being considered by the examiner.

***Drawings***

5. The Examiner has approved drawings filed on 7/5/05.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 5-8, 10-11, 14, 19, 23, 45, 49, 52, 54, 55, 65-67 and 70 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasabach et al., (US. 6,456,749 B1).

As to claim 1, Kasabach et al., discloses biometric, acoustic writing system having:

(a) a pen housing for making hand-guided movements on a substrate (note, pen housing , column 2, lines 66-67 , column 3, lines 1-4, and fig 1 element 16(writing tip) of the instrument (12) for writing as a substrate);

(b) at least one microphone, which is integrated in the pen housing, for acoustic recording of sound signals which are caused by the hand-guided movements (note, a microphone integrated into the pen housing (fig 1, element 24) for recording sound signals , column 4, lines 15-16); characterized by

(c) having a data processing unit for calculation of biometric data as a function of sound signals that are recorded (note, data processing unit along with memory which is writing the device , column 4, lines 28- 42, and fig 2 , element 30 and 32).

As to claim 2, Kasabach discloses biometric, acoustic writing system according to claim 1, characterized in that the data processing unit is provided for obtaining biometric features and for reconstruction of handwritten characters and texts from the recorded sound signals ( note, column 5, lines 28- 39, describes the function of the writing instrument and the processor along with memory is using the biometric data to reconstruct (store the characters in memory or transmit the information through electronic means).

As to claim 5, Kasabach discloses biometric, acoustic writing system according to claim 1, characterized in that a pen is provided in the pen housing (note, column 3, lines 2-4 and figure 1, element 15 and 16- shows the pen housing and pen in the writing instrument ), the substrate is a fixed writing substrate which has a specific pronounced surface roughness and hardness (the writing substrate is (fig 5, element 42) shows for writing with the writing instrument (fig 1, element 10), the hand-guided movement is a writing movement and the pen, when placed on the substrate, is capable of creating friction on the substrate during the hand-guided writing movement , thereby producing an acoustic writing noise , which is capable of being transmitted to the microphone (note, the acoustic signals are picked up by a microphone (fig 1, element 24), from both the pen tip and airborne), as a structure-borne sound signal via the pen and as an airborne sound signal via surrounding air.

As to claim 6, Kasabach discloses biometric acoustic writing system according to claim 5, characterized in that the microphone is mechanically coupled to the pen in

order to transmit the structure-borne sound signal( note, the microphone (fig 1, element 24) is mechanically coupled to the pen(writing instrument , column 4, lines 15-16).

As to claim 7, Kasabach discloses biometric, acoustic writing system according to claim 5, characterized in that the microphone is mechanically coupled to a sound body, which is connected to the pen, in order to transmit the structure-borne sound signal (note, the writing system which is a biometric acoustic writing instrument has a microphone coupled to the body, column 4, lines 15- 18).

As to claim 8, Kasabach discloses biometric, acoustic writing system according to claim 7, characterized in that the sound body is in the form of a resonator for specific natural frequencies (note, the pen housing (fig 1, element 15) body acts as resonator structure to which is attached the microphone (fig 1, column 24).

As to claim 10, Kasabach discloses biometric, acoustic writing system according to claim 1, characterized in that the microphone is arranged in an air bearing sound chamber, which is provided in the pen housing with the air bearing sound chamber being in a form of a resonator for specific natural frequencies(note, the body of housing for the pen (fig 1, element 15, has a hollow space around the pen which is inside the body of the writing instruments , column 4, lines 15-18) .

As to claim 11, Kasabach discloses biometric, acoustic writing system according to claim 10, characterized in that an interchangeable pen refill with an ink filling is provided as a pen in the pen housing, and the microphone and the resonator are surrounded by sound insulation, which is intended to attenuate environmental noise and passes sound signals only via the writing refill (note, the writing instrument (fig 1,

element 12) may be a pen or pencil etc.(column 3, lines 1-4), signal input may be selectively chosen to include either through the pen or from the outside (verse) by the user) .

As to claim 14, Kasabach discloses biometric, acoustic writing system according to claim 5, characterized in that, when the housing opening is open, the microphone acoustically records the internal and external writing noise which is caused by the hand-guided writing movement as a structure-borne and airborne sound signal or acoustically records a speech signal which originates from a person or both (column 4, lines 15- 18, fig 1, element 24, the microphone records sound signals from a person and the sounds from the surrounding environment of the writing device , column 4, lines 21-23).

As to claim 19, Kasabach discloses biometric, acoustic writing system according to claim 1, characterized in that the writing substrate is composed of any desired paper (the writing substrate may be paper, column 5, lines 52- 55 and fig 3, element 42).

As to claim 23, Kasabach biometric, acoustic writing system according to claim 1, characterized in that a pen is provided in the pen housing, and a pressure sensor device is additionally provided, which records a static writing pressure and a dynamic writing pressure in at least one spatial direction of the pen when the pen is placed on the substrate and hand-guided (note, the writing instrument 10 has a pen housing fig 1, element 12 and 15, the sensor (fig 1, element 36, is designed measure the dynamic pressure changes namely the pressure values as the user is writing write it, column 4, lines 50-55).

As to claim 45, Kasabach discloses biometric writing system according to claim

23, characterized in that the pressure sensor device comprises piezoelectric sensors, piezoresistive sensors, force-sensitive resistances, magnetic sensors, or a combination thereof ( note, the pressure sensor is a for a sensitive resistance based on device, column 4, lines 50- 57) – (staniguage).

As to claim 49, Kasabach discloses biometric writing system according to claim 1, characterized in that the data processing unit is integrated in the pen housing or in an external receiving unit ( note, fig 2, element 30 and column 4, lines 28- 32).

As to claim 52, Kasabach discloses biometric writing system according to claim 1, characterized in that a scrambling unit (17) is provided in the pen housing (3) in order to scramble reference data( note, the data may be handled using cellular technology which included a means of scrambling data , column 5, lines 40- 45).

As to claim 54, Kasabach discloses biometric writing system according to claim 1, characterized in that a data memory is provided for storage of biometric reference data, and of data for handwritten characters, texts and spoken speech (note, the writing instrument (fig 1, element 10), column 4, lines 15-42 includes the data storage space in the form of a solid state memory. The data could be biometric reference data, (column 4, lines 50- 57) of a person using the device to write), spoken audio information (column 4, lines 22-23), hand written text information, (column 4, lines 58- 64).

As to claim 55, Kasabach discloses biometric writing system according to claim 54, characterized in that the biometric reference data is calculated by the data processing unit from sound signal data which is recorded while writing and speaking at least one word, from optical movement data, from mechanical oscillation and pressure



data, and from inclination data, and is stored in a reference data memory (note, the written spoken fig 21, element 24 and mechanical movement (fig 21, element 36) of the writing instrument are stored in the memory (fig 2, element 30). Also the narrative in column 4, lines 15- 64, explains the use of the memory located in the device (fig 1, 10).

As to claim 65, Kasabach discloses biometric writing system according claim 55, characterized in that the data processing unit is integrated with a local computer having a computer data processing unit, and the data processing unit and the computer data processing unit compare the calculated current biometric data with the stored biometric reference data in order to verify and identify it (note the processor in the writing instrument ( fig 1, element 10) has a microprocessor and memory (fig 2, element 30). It also communicates with a computer through a base (fig 6, element 54 and cable 56), column 8, lines 15-16, 22- 24).

As to claim 66, Kasabach discloses biometric writing system according to claim 65, characterized in that the data processing unit and the computer data processing unit produce an identification indication signal, a verification indication signal, or a combination thereof when the current biometric data largely matches the stored reference data (note, the data processing unit written the writing instrument (fig 2) analyses the imprint information and identifies based on the stored data , column 5, lines 32-36).

As to claim 67, Kasabach discloses biometric writing system according to claim 66, characterized in that the data processing unit and the computer data processing unit identify the current biometric data as a stolen copy of the stored reference data, and

produce a warning signal, if the current biometric data completely matches the stored biometric reference data (note, column 5, lines 35-39). The processor (fig 2, element 30) identifier input as recognizable or non- recognized writing).

As to claim 70, Kasabach discloses biometric writing system according to claim 55, characterized in that single characters which are currently being written are reconstructed by means of the stored biometric reference data for a person who has been identified or verified via the handwritten input (note, the processor(fig 2, element 30) within the instrument( fig 1, element 10) may also be programmed to recognize characters from the stored memory, fig 1, is the instrument and fig 2is the algorithm showing the processor).

***Other prior art cited***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fleck et al., (US. 6,259,438 B1) discloses coordinate input stylus.

Marshall (US.5,774,571) discloses writing instrument with multiple sensors for biometric verification.

Rabin (US. 6,603,464 B1) discloses apparatus and method for record keeping and information distribution.

Williams et al., (US. 7, 176,906 B2) discloses method of generating digital ink thickness information.

***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela C Chawan whose telephone number is. 571-272-7446. The examiner can normally be reached on Monday - Friday 8.30 am - 5.00 pm and every Wednesday work from home. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sheela C Chawan/

7/3/09

Primary Examiner, Art Unit 2624



